
FOLIO

The Senate

The University of Alberta Senate held its first meeting of the new year on Friday, 25 January. The following items were among those on the agenda.

Commission on University Purpose

At the 16 November 1979 meeting of Senate a resolution was passed in which, by virtue of the authority given to Senate in *The Universities Act*, Senate decided to establish a Commission on University Purpose. According to that resolution, the Commission will "inquire into the nature, purpose or purposes, and function of a 'University' . . . generally, but having before it the particular situation of The University of Alberta." On 25 January, therefore, an important item for discussion was the proposed plan of action for the Commission.

Firstly, the membership of the Commission was announced: Co-chairmen are G. Cormack and J. McDougall; members are R. Basken, A. Burrows, G. Campbell, P. Czartoryski, T. Frank, E. Geddes, T. Haberman, M. Lobay, D. Richardson, P. Schouls, S. Sprague, W. Stewart, and K. Weiher.

Secondly, a program was adopted with a view to submitting a final report in April or May 1982. The first phase in the plan of action has to do with public awareness. It is intended by Senate that this phase, to be concluded by March 1981, will stimulate public interest in what constitutes a university. The public awareness program will be built around a group of invited speakers who should be

"knowledgeable persons, of high profile, reputation and credibility sufficient to attract public interest." The speakers, whose names were suggested to Senate, include such notables as David Suzuki, Robertson Davies, Malcolm Muggeridge, S. Hayakawa, Pauline McGibbon, and John Silver. It must be noted, however, that the Commission only reported such names to Senate as examples of the manner of people, whom, in its opinion, the Commission should invite. None of the people, in fact, have been invited to participate in the proposed lecture series.

In the second phase of the Commission's work, emphasis will be placed on the reaction and participation of the public. By means of briefs and submissions, the Commission will endeavor to ascertain what people within and outside our own institution thought about the invited speakers and about the nature of a university. This second phase would overlap with the first phase of the endeavor and come to a conclusion in the fall of 1981.

The Commission, however, will not limit its activities to stimulating public awareness and receiving public reaction. In phase three, it is proposed that a review be done of the historical development of universities—including our own—to describe, among other considerations, the differences in university systems and approaches.

The fourth and final phase of the Commission's program will be devoted to the writing and submission of an authoritative report.

Visiting International Students

A year ago, in February 1979, the *Task Force Report on Visiting International Students in Alberta* was presented to Senate, (see *Folio*, 15 March 1979). On 25 January 1980, therefore, according to accustomed practice, a "Follow Up" report was submitted for Senate's consideration. This report gave details of the activities of the Chancellor and other members of Senate and members of the University community. The original *Report* of the Senate's Task Force proved to be of great interest to organizations and individuals all across Canada to the extent that some 400 copies of the *Report* have been distributed. According to the "follow up" committee: "It was the first time such a comprehensive Report had been prepared by a university, and the issue dealt with is obviously of concern to many."

In considering the report of the "follow up" committee, Senate's attention was drawn to a CTV "W5" television program broadcast on 30 September 1979 and to the possibility that our University's publication may have played some part in formulating several ideas expressed in that program. Unfortunately, the "W5" presentation, which dealt with the issue of "foreign" students, is considered by many—including the Association of Universities and Colleges of Canada—to have been misleading. On 5 October 1979, the AUCC issued a communiqué protesting what it termed

the program's "many distortions and inaccuracies." (See *Folio*, 18 October 1979).

Since that date, opposition to the "W5" program has mounted to the extent that those responsible for the "W5" presentation have prepared a written *Reply* to accusations that the program was misleading. Inasmuch as *Folio* reported the AUCC's disagreement with the "W5" presentation, it has decided to publish the text of the "W5" *Reply*, which is titled "Foreign Students in Canada." There is an additional motive for publishing the "W5" response. In the response, some weight is given to statements contained in the Senate's *Task Force Report on Visiting International Students in Alberta*. The Senate has not yet issued a formal response to the "W5" *Reply* "Foreign Students in Canada" but, at the 25 January meeting, several members expressed reservations about the "Reply" and wondered whether or not the *Task Force Report's* statements, although cited properly, were perhaps taken "out of context."

In reviewing the "W5" response which is printed below, readers should be aware of The University of Alberta's policy concerning enrolment. This policy is printed in the *University of Alberta Calendar*:

"13.1.2 Limitation on Enrolment in Quota Faculties

Enrolment in any faculty will necessarily be limited to the number of students who can be accommodated. When the number of applicants exceeds the number of places available, students are

normally accepted in the order of their academic standing from among the whole list of applicants.

Up to 85 percent of the places in quota faculties are normally reserved for Alberta residents (as defined below*). For the remaining places, the residence constraints do not apply: our goal is to make at least 5 per cent of the places in quota programs available to foreign students, and at least 10 per cent to Non-Alberta Canadians, providing that no non-resident of Alberta is admitted who is less qualified than any Alberta resident who is denied admission. . . .

*A resident of Alberta is defined as a Canadian citizen or Landed Immigrant who has been domiciled in the Province of Alberta or Yukon or Northwest Territories for at least one continuous year immediately prior to the date of intended registration at the University."

W5 Reply: Foreign Students in Canada

Canadians take a great pride in being patrons of the world—the Third World in particular—and most agree that Canada has a moral obligation to support, feed—and help educate—under-privileged people from under-developed countries of the world.

FOLIO

*Volume Sixteen
Number Thirty-one*

All inquiries and correspondence should be directed to:

Folio
Office of Community Relations
423 Athabasca Hall
University of Alberta
Edmonton, Alberta T6G 2E8
Telephone: (403) 432-2325
The Office of Community Relations produces Folio on a weekly basis for the staff and other interested persons

Copyright 1980

Our concern as a nation is the *raison d'être* for Foreign Aid and our rapidly expanding Foreign Student Program: The number of foreign visa students enrolled in Canadian universities doubled in just 3 years, from 14,246 in 1973-74 to almost 29,000 in 1976-77, the cause of much concern and public outcry. The result: the imposition of differential fees in four provinces and the introduction of quotas on the number of visa students in certain courses in some faculties and universities across Canada.

The Canadian Bureau for International Education (CBIE) almost immediately countered with the most intensive survey ever conducted on foreign visa students in Canada. For the first time, we found out who was/is here, things like financial status, previous background and racial balance. And we discovered that our picture of a foreign visa student as a poor, under-privileged kid who's here to study courtesy of CIDA, or publicly funded so he/she can go home and help improve things there, is totally wrong. We were told instead that our tax dollars were being used to educate wealthy students—at the expense of poor, genuinely needy foreign students and, often, Canadian students.

The results of the report, "Patron for the World" were shocking and a far cry from what we hoped to achieve in our foreign student program. It showed that the majority of foreign visa students are from wealthy homes—"from the élite in their own countries"—is the way the report puts it. It also showed that the majority are extremely well-educated by our standards, completing secondary school with a British "A" level or the equivalent, considerably higher than the Canadian Grade 13. We learned that the majority repeat Grade 13 here to get a formal credit, extremely high marks and easy entrance into Canadian universities. Almost 80% of Ontario's visa students have taken Grade 13 here for the second time (not including private secondary schools); almost *all* students from Hong Kong do this

as a matter of course: virtually 90% have attended a Canadian high school Grade 13 or a community college to meet university entrance requirements.

The result of the recent trend towards secondary school visa students—a relatively new phenomenon generally ignored by critics of our program—is the establishment of from 25 to 30 private schools that cater almost exclusively to wealthy Oriental students from Hong Kong, Malaysia, *et al.* These schools charge \$5,000 and up and offer Grade 13, language skills and courses geared to university entrance. Virtually 99.9% of the students attending these schools are university bound. The average size: 200 to 300 students; and some are on the semester system, meaning that up to 1,000 students can graduate per year on the semester system.

"Patron for the World" also showed that our view of the Third World seems somewhat distorted: Of the 92 countries classified, a full 33% of the students were from Hong Kong; and the majority—60 to 65%—are ethnic Chinese from Southeast Asia. The report refers to the situation as "a disproportionate number of students from Hong Kong and Southeast Asia, notably Malaysia . . ." (Indeed, in such a situation—which is elaborated on in following paragraphs—it is obvious that W5 simply could not have made this program without showing large numbers of Chinese students.)

The *Report of the Task Force on Visiting International Students in Alberta* (February, 1979) goes a bit further:

"In Canada, 33% of all students are of Hong Kong citizenship. They represent 41% of all visa students at the University of Alberta and together with Chinese students from Malaysia, make up a full two-thirds of all undergraduate visa students at the U of A."

The Task Force feels that the disproportionate number of visa students from Hong Kong is the single most important factor in what has become the Foreign Student issue. The Task Force could not define what an ideal mix of students would or should be. But they did conclude there

should be "a more even balance from among all areas of the world."

It asks why there is no official acknowledgement or reference to "the imbalance" and believes the reason to be primarily because of a mistaken view that any official reference may be in conflict with existing Human Rights legislation. It also feared that a public debate of the situation might provoke the need for a policy statement by the government and/or the university and the consequent risk of being branded discriminatory or racist . . . a risk that W5 also knew it was taking in airing the program. It concluded that the result of the official silence re student mix is "that there are only the most general admission policies in effect" and likened the general attitude to "the economic principle of laissez-faire—may the best-equipped, most resourceful applicant succeed."

The visa student from Hong Kong is obviously the best-equipped and the most resourceful; and the Task Force notes that the student from Hong Kong leaves no stone unturned to secure an education abroad. In fact, it questions whether Hong Kong students can be considered typical visa students without classifications: "The emphasis on securing an education rather than the pursuit of a specific pre-selected program is more typical of the Hong Kong student. This suggests a very opportunity-oriented approach which, combined with other circumstances, would seem to lead quite naturally to an attempt on the part of many to seek landed immigrant status with all the problematic consequences following therefrom."

"The latter characteristics alone leads us to question whether the Hong Kong student can be considered a visa student without qualification." **Visa students are supposed to study then return home, not become landed immigrants, as the above implies.***

The Force discussed, among other things, "the survival instinct of the Hong Kong student and the drive to gain a foothold abroad, due to excessive competition at home and inadequate post-

secondary institutions.” (There’s no education tax in Hong Kong). It states: “An aspect of the Hong Kong students’ apparent academic advantage stems from the fact that, apart from a British “A” level certificate on graduation, an est. 80% have attended a Canadian high school (Grade 13) [no mention of Grade 13 appears in the Task Force Report. Ed.] or community college in order to meet university entrance requirements. This means they have at least a year to adjust to the Canadian milieu, economy, language etc. before entering university. Moreover, it is a common experience for Hong Kong students to repeat their high school subjects in the Canadian setting, achieving very high marks in the process.” (This was a point emphasized in the W5 program to illustrate how Canadian students are placed at a disadvantage.) Following in the footsteps of Hong Kong students are ethnic Chinese from Malaysia (Malaysia has imposed stringent quotas on Chinese students: 80% of all university seats are reserved for native Malaysians and the Chinese who make up 40% of Malaysia’s population are eligible for only 20% of all university seats) and other parts of Southeast Asia. They, too, are repeating their high school subjects in Canadian high schools, achieving very high marks in the process.

The results of our non-policies and preference for the rich have been devastating. As the *Report* indicates, changes taking place in visa student population are not illustrated in the statistics and because of this, it’s easy to assume that there are no changes. However, as the *Report* points out, there are some very significant changes that indicate future trends and a change in the make-up of our visa students. The most important factor is that the number of poor and non-sponsored students has declined.

The Report again:

“Perhaps the most significant trend is the slowly declining enrolment of undergraduate students from Third World countries (excluding Hong Kong, Malaysia *et al*). It appears that, unless these students are sponsored, they are unable to come

to Canada. This is important because at the same time as the non-sponsored Third World student is declining, CIDA enrolment which also included this group, is also declining. There is a slight increase in the number of students sponsored by their own countries but these are very few in number. At the same time, there is a marked increase in non-sponsored undergraduate students from Malaysia; and this group, in addition to students from Hong Kong, both largely undergrads, comprise approximately two-thirds of all undergraduate visa students at the University of Alberta.”

****And more important:**

“This is consistent with the enrolment figures in other parts of Canada. It appears that the training of undergraduates in Canada, with the exception of a very few countries, is a luxury not many students or countries can afford . . .”

What it boils down to is that poor students who could benefit from our largesse—and education—are being left out in the cold, along with some of our own students, because we expect to be paid for our “charity” and paid well. And poor students can’t pay. Instead of opportunity, we have opportunists.

Our foreign student program, far from what it might be, has become a matter of self-interest: a monetary issue . . . It’s a dollar and cents operation, with Canadian education being sold for the most bucks like an international commodity. This view is strongly supported by the CBIE, the universities that impose differentials that favour the rich visa student and help off-set hefty government cutbacks, and public high schools that are said to be fighting over visa students, who pay as much as \$2,500 and up to repeat Grade 13 here. Even private citizens are cashing in on the influx of wealthy students by opening posh private schools that cater exclusively to the needs of foreign students.

At last count, (Immigration Department) 90% of Canada’s visa students were privately funded. And the number is growing.

The present rules for admission into secondary schools are extremely lax: Any student who can show that his/her name or that of his/her legal guardian is on the assessment rolls is

entitled to admission within the school area. Local school boards or schools do not get into the legalities of whether students are here legally or illegally. They feel that’s up to Immigration. The result: chaos and resentment, according to one official.

In Ontario, legislation was drafted to make it impossible to attend high school here without a student visa or landed immigrant status. But the Bill went down on the 2nd reading and now there are no limitations, according to the same official. And the picture is the same all across Canada, he says.

So, lax rules and the opportunist approach documented above have made things difficult not only for poor foreign students but also Canadians. Canadians simply can’t compete in a system where they’re up against others who are better educated to start with, and are repeating Grade 13 for a formal credit and language skills.

Critics of the system say differentials and quotas are not the answer: Differentials don’t keep out the rich, just the poor. And quotas only serve to convert visa students to landed immigrants. Once they’ve achieved landed immigrant status, they can take any course they choose. And it is the opinion of many people W5 talked to that this not only happens, it happens often, contrary to rules covering visa students that say they must go home after completing their studies. One Immigration official said our complicated “point” system, nomination schemes, extended families and a lax attitude make it easy.

Things are so lax at Employ- and Immigration that it’s impossible to get an accurate figure—or any figure at all—for the number of foreign visa students in Canada. The official we approached said, “it was a very awkward figure to release. . .” and indicated that contrary to rules about not working, visa students do work and switch visas so often that the scene is one of mass confusion. CBIE’s John Helliwell, Director, Foreign Student Affairs claims there are 55,000 visa students in

Canada (a figure W5 used) but admits his figure is “a guesstimate.” It’s more likely to be too low rather than too high. In StatsCan’s phrase: “55,000 is unrealistically low.”

We decided to go with StatsCan figures since they were the most up-to-date and provided a simple breakdown by province and field of specialization, as well as the number of visa students and landed immigrants. However, the figures were only for 17 selected universities: they have no data for community colleges or secondary schools in Canada. We asked the Canadian Association of Community Colleges for a breakdown on the number of foreign students and landed immigrants in community colleges across Canada and was [sic] told they do not keep such information. The same applies to secondary schools. We went back to StatsCan, then to Immigration, for a complete breakdown. However, they don’t know either. In fact, they don’t seem to know who’s where . . . Canada has such lax rules re departure dates that no exit visa is required, we were told.

So far, the official response to the foreign student situation (as outlined here) has been one of silence or screams of “racism” when the subject is raised. To quote one columnist, “anyone who has taken on this subject must be prepared to be pursued by as many demons of hell as the liberals can muster . . .”. And in fact, any politician who was brave enough to raise the issue in the House was promptly castigated and silenced.

The result, of course, is that people are afraid to talk: afraid of being called racist; afraid of the Human Rights element; and afraid of losing jobs—we are absolutely sure that anyone of the university or government officials we spoke to would have been fired, had a public statement been made. That is why they gave us facts but refused to appear on film.

Most people we talked to were guarded and afraid of being branded racist. However, many finally did speak up, “off the record” . . . All are very upset

and many feel Canada is being suckered as a nation. All agreed that Canadian students are being done out of seats: not by "superior" Orientals, as John Helliwell would have us believe; but by Orientals who are better educated than Canadian when they come here and complete their Grade 13 studies for the second time. They also agreed that visa students are getting around quotas by entering limited enrolment courses as landed immigrants—and that their hands are tied because of government policy which makes it easy for people to become landed immigrants. Some

described what's happening as "heartbreaking". . . . Another, more sinister element, emerged during the course of our investigation: the Chinese have been accused of running the largest illegal immigration racket in the world via so-called "extended families" and phony job offers. We're told several thousand dollars will buy your way in—and into the system. There's no doubt that they're highly organized: one case that was cited, was that a Chinese girl employed by an Alberta school board who was sending out hundreds of phony acceptance letters to

graduates back home in Hong Kong. These were accepted by Immigration until she was caught.

We are certain that few people in Canada question the value of a properly administered, controlled foreign student program: one that ensures not only a better mix but prevents domination of the program by any one privileged group of students; and one that ensures that our tax dollar will educate the poor, not the rich, and not at the expense of Canadian students.

W5 never once suggested that we not have foreign students. Or that we not have a foreign

student program. However, it's part of our job as a public affairs show to ask questions and to question established systems. We don't always agree with the popular concept or accepted view. And we have a right to question the value of our present program; and far more disturbing than accusations of inaccuracies in our facts, are attempts and threats to refer the program (W5) to the CRTC and the Canadian Human Rights Commission to shut us up once and for all. It seems that freedom of speech is pretty low on the list of priorities these days. □

Norman Stuart Macpherson, 1911-1980

Norman Stuart Macpherson combined a quietly determined manner with a warm and friendly attitude that won admiration and success. He was born of Scottish parents in Medicine Hat, and moved to Edmonton at the age of two years.

In 1945, after war service in the Royal Canadian Navy, he joined the Canada West Grain Company Limited, which in 1961 became the Seed Division of the United Grain Growers Ltd. He was manager of that company from 1969 until his retirement in 1976.

His favorite recreation was golf, but he gave many hours to service clubs and charitable organizations. He was Past-

President of the Edmonton Burns Club, and a well-liked member of K40 and the Masonic Lodge.

The University of Alberta will remember him well for his devotion in recent years to the Devonian Botanic Garden. In 1974 that Garden (north of Devon on Highway 60) suffered a severe setback when extensive plantings were completely flooded out. It was at this time that Norman Macpherson joined the off-campus support group, the Friends of the Botanic Garden.

In 1975, as Vice-president of that charitable Society, he spearheaded a search for substantial funding. The aim was not only to correct the flood situation at the Garden, and to fund the com-

pletion of specialty gardens on that property, but also to establish a permanent on-site Headquarters Building and Greenhouse complex with a price tag exceeding one million dollars. Up to that time the Botanic Garden had operated from rooms in the campus Greenhouse Building, and later from the Biological Sciences Building, more than twenty miles from the Garden.

Norman Macpherson chose to visit Calgary and explain the needs of the Garden to representatives of the Devonian Group of Charitable Foundations. His efforts met with success, and in March 1976, after many more meetings, an agreement was signed between the Devonian

Group and the Board of Governors of The University of Alberta. The substantial grant from the Devonian was matched by the provincial Dept. of Advanced Education, and the new Headquarters Complex, Phase One was ready for occupancy in November, 1978.

For his very significant efforts in launching The University of Alberta Devonian Botanic Garden on a new phase of progress, Norman Macpherson was awarded one of only three Honorary Memberships bestowed by the Friends of the Botanic Garden. He remained President of that Society until shortly before his untimely death on 18 January 1980 after an illness of some three years. □

Mrs. H. A. Dyde, 1909-1979

Garden staff and Friends of the Garden were saddened to learn of the death on 26 November 1979 of Mrs. H.A. Dyde. Mrs. Dyde was not only a neighbour and regular visitor to The University of Alberta Devonian Botanic Garden, but also a charter member of the Friends, and a frequent and generous benefactor. Her participation as an outspoken

member of the Board of Trustees of the Friends was highly valued, and will be greatly missed. The Friends bestowed upon her an Honorary Life Membership in 1974.

She was predeceased by her husband, Col. H.A. Dyde, OBE, MC, QC, who, twenty years ago, deeded to The University of Alberta some eighty acres of

unbroken land north of the town of Devon. It was the intention of Mr. and Mrs. Dyde that the land should be developed as a botanic garden, and would be used for plant introduction, testing, and for plant research.

Mrs. Dyde was particularly fond of our native wildflowers and trees, and spent many hours in all seasons enjoying the

winding trails through her own and the Botanic Garden properties. It was because of the Dyde enchantment with the native flora that the "Sandy Dyde Nature Trail" was constructed in 1978, and officially dedicated at the official opening ceremonies in 13 June 1979. □

Research Reporter

Bloodletting Used in Treatment of Circulatory Disease

Scientists at the University of Alberta have shown that one of the oldest medical practices known still has a place in modern medicine.

The medical researchers have found bloodletting to be of benefit in the treatment of patients whose lung disease has resulted in a circulatory problem known as polycythemia.

E.L. York, a research associate working on the project with professors of medicine B.J. Sproule and R.L. Jones, describes the development of the secondary polycythemia as "a vicious circle."

The sole function of the lung is to bring into proximity blood and air in order that oxygen can be supplied to the blood in exchange for the carbon dioxide it is carrying. The blood then carries that oxygen to all of the body cells.

By definition, chronic obstructive lung diseases—emphysema and bronchitis are examples—impede this function, slowing the supply of oxygen to the cells. Polycythemia occurs when, in an attempt to compensate for the reduced oxygen supply, the body begins to produce more hemoglobin, the substance in the blood which combines with oxygen so that it can be transported. However, an increase in the amount of hemoglobin is also an increase in the ratio of solids to plasma in the blood, and the blood becomes more viscous—less inclined to flow. The increased resistance to flow results in further inhibition of the oxygen supply, and the body adds even more hemoglobin to the blood. But, of course, this further increases the viscosity of the blood and the whole cycle begins again. As Dr. York says: a vicious circle.

Naturally the more remote regions of the body are more affected; of particular concern is the poor supply of oxygen to the upper regions of the brain. And it is not surprising that this condition is more prevalent at higher altitudes, where the air is "thin" to begin with.

For their study the University of Alberta researchers obtained the assistance of six persons who had been admitted to Edmonton hospitals for treatment of chronic respiratory disease. Frequent complaints of the patients, even after their respiratory conditions had been stabilized, were headache, dizziness and a heavy sensation in the head. Testing showed that, on the average, their blood contained almost 60 parts of solids to 40 parts of plasma; testing of 38 other volunteers gave a "normal" ratio of just over 43 parts solids to about 57 parts plasma.

By venesection—the medical term for bloodletting—the ratio of solids to plasma for the patients was brought closer to normal, about 45 parts solids to 55 parts plasma. Dr. York says that this is possible because the body replaces the solid parts of the blood much more slowly than it does the liquid—the plasma—which is quickly replenished. He says that the amount of blood taken from an individual is approximately the same as that taken for a blood donation, about a pint.

Before and after tests using special monitoring equipment developed in the pulmonary division of the University's Faculty of Medicine showed that the bloodletting resulted in a mean improvement in the flow of the blood to the upper regions of the brain of 80 per cent. And most important, if not measurable, the patients said that they felt better. Over a period of time, however, the proportion of blood

solids again increases and the bloodletting must be repeated. Normally, about once every six months, says Dr. York.

To gain additional information, the researchers are currently conducting further research including before and after tests related to heart function, cardiac output, and blood pressure. They are also interested in determining if the differing flows of blood to the brain have any bearing on the individual's ability to perform tasks.

Research Provides New Evidence Against Smoking

"The results indicate that even in young individuals the lungs are functionally disturbed by smoking and the pattern of abnormality is similar to that seen in patients with chronic obstructive lung disease."

With that simple statement, made all the more emphatic by its clinical austerity, a research paper investigating "Effects of smoking on [the lung's] regional residual volume in young adults" provides powerful new evidence for the case against smoking.

Richard L. Jones and Ernest L. York of The University of Alberta tested young smokers with 'healthy' lungs—"healthy" according to the standard tests of lung function—and found that, almost without exception, the performance of their lungs was impaired. The testing was done using special equipment developed in the pulmonary division of the Faculty of Medicine.

The volunteers who took part were all under the age of 30; the average age, both for smokers and non-smokers was just under 24 years. The smokers had cigarette consumption rates ranging from five to 15 pack-years

—a pack-year being the product of packs smoked per day and years smoking; for example, smoking half of a pack of cigarettes per day for 10 years would result in a rating of 5 pack-years.

Whereas most previous testing of young smokers had monitored the air entering and leaving the lungs by measurements at the mouth, the University of Alberta researchers decided to do more detailed, and therefore more exact, testing to observe what was happening in the lung itself.

Specifically, they were interested in regional residual volume—the amount of air remaining in different parts of the lungs when an individual exhales completely. Measurements were made possible by having the volunteers inhale and exhale a small amount of xenon-133, an inert radioactive gas, as part of the air supply. Probes sensitive to radioactivity were placed close to the chest at five levels to monitor what was taking place. The radiation each individual was exposed to was less than that involved in a regular chest X-Ray.

While the measurements taken from the non-smokers taking part corresponded to those considered normal for a healthy lung, the smokers retained a greater quantity of air in the lower lung regions. In the words of the research paper: "... the combination of small airways and hypertrophied walls caused by smoke irritation apparently causes basal airways to close at lung volumes higher than normal." And the more retained air, the less space for fresh air.

Seeing someone burdened with a chronic lung disease, perhaps emphysema or bronchitis, struggling to breathe as high in the lung as possible, provides striking evidence that their difficulty, although more severe, is similar.

The researchers would have

liked to expand their study to include similar tests of smokers over 35 years of age and to monitor the changes, if any, over time for smokers who had quit. However they gave up: it proved too difficult to find smokers over 35 with "healthy" lungs or to get smokers to quit.

Curiosity Leads to Breathalyser Study

Dick Jones is a friendly sort of guy and the festive season was fast approaching. However, it wasn't bonhomie that prompted the Associate Professor of Medicine at The University of Alberta to invite some former patients over to his office for a drink, even arranging for taxis to pick them up and take them home again. It was curiosity.

And while the patients were in fact assisting a scientific study, most found it not at all unpleasant. What with Dr. Jones being naturally good humored and an

attractive young girl helping out, it actually provided a welcome break.

The study was designed to determine how the accuracy of standard breathalyser tests for blood alcohol level is affected by chronic obstructive lung disease. For some time it has been recognized that breathalyser readings taken from persons suffering diseases such as bronchitis and emphysema may not be accurate. And, says Dr. Jones, he often got phone calls from lawyers representing clients with such diseases asking him to testify to the possibility that their client's blood alcohol level was lower than measured.

Turning to the medical literature on the subject, he found it somewhat sparse. Eventually, to satisfy his curiosity, he decided to do some investigations in that area himself. Now he advises the lawyers who call to find a new defence—their client's blood alcohol level was likely underestimated (barring faulty equipment or improper use of it).

Dr. Jones explains that the lungs

of persons with chronic obstructive lung disease do not empty the same as do those of other people. Normally the lung empties fairly uniformly, air from all of its regions mixing together as it leaves. However chronic obstructive lung disease causes a change: the lung empties region by region. And while some of the regions are well served by blood vessels, others receive a poor supply of blood; this results in varying regional ratios of blood to air. The breathalyser reading is taken at a single instant of exhalation, therefore for someone with chronic obstructive lung disease it gives only a regional picture, one affected by the blood to air ratio in that region.

Dr. Jones' study was designed to measure breath alcohol continuously during exhalation so that fluctuations in breath alcohol concentration could be identified. To do this, he sought assistance from former patients of the pulmonary division who had an appropriate medical history—severe airway obstruction without a history of alcohol-related

problems. Each was administered sufficient alcohol to bring his blood alcohol level to about half the legal limit for driving, and measurements were taken at intervals afterward.

Dr. Jones says that while, as expected, widely different breath alcohol readings were obtained during the course of an individual's exhalation, at no time was a reading obtained which was higher than the blood alcohol level as shown by blood tests. He says that there is, in fact, a saturation point; once that is reached the amount of vaporous alcohol in the air will accurately reflect the blood alcohol level.

Dr. Jones says that it is not possible to "super-saturate" the air—no matter how little air and how much blood are brought together in a lung region. On the other hand, if there is a great deal of air and little blood, the saturation point may not be reached, and a reading taken when such a region is being emptied gives a lower than actual picture of the individual's blood alcohol level. □

General Faculties Council

The next meeting of GFC will be held on Monday, 11 February 1980 at 2 p.m. in the Council Chamber, University Hall. The agenda for that meeting follows:

1. Approval of the Agenda
2. Approval of the Minutes of 28 January 1980
3. Question Period
4. New Members of GFC 1980-81

Reports

5. Executive Committee Reports
 - 5.1 Executive Committee Minutes of 21 January 1980
 - 5.2 Executive Committee Minutes of 4 February 1980
6. Report of the Board of Governors
7. Report of the Nominating Committee

Business Arising

17. Faculty of Engineering:

Cooperative Educational Proposal

New Business

20. Representation on GFC: Request from the Principal of St. Joseph's College
21. Quotas: UPC Report on the Rationale, Criteria for Numbers and Procedure for the Establishment of Student Quotas
22. Full-time and Part-time Students: Proposed New Definitions
23. Preparation of Operating Budget Guidelines: UPC Submission
24. GFC Undergraduate Scholarship Committee: Annual Report for 1979
25. GFC Writing Competence Committee: Assessment of Writing Competence—Report on Phase I and Addendum to the Report
26. Other business. □

G.F.C. Nominating Committee—Replenishment of Standing Committee, 1980

The term of office of a number of members of the standing committees of the General Faculties Council will expire in the Spring, and during the next few months the Nominating Committee will be selecting nominations for the replacement of these members. Replacements will also be required for those members of committees whose terms of office will be interrupted by sabbatical leave during 1980-81.

All full-time, and part-time members of the academic staff, the non-academic staff, the graduate and undergraduate students of the University are eligible for election to these

committees and membership is not restricted to members of the General Faculties Council unless specified. The terms of office for staff members are for periods up to three years, commencing 1 July 1980. The terms of office for student members are for one year, commencing 1 April 1980. Members who wish to serve a subsequent term of office may be nominated for re-election.

The Nominating Committee will be pleased to hear from staff members and students who have suggestions for nominations or who would be interested in serving on the standing committees of General Faculties Council. Interested persons should contact the Secretary of the Nominating Committee, 2-1 University Hall. It would be appreciated if a brief vita could accompany any nomination.

The standing committees where

vacancies will occur are listed below:

	Staff	Student
Committee Vacancies	Vacancies	Vacancies
Executive Committee (nominees must be members of GFC)	6	3
Academic Appeals Committee	1	3
	3 alternates	
Academic Development Committee	4	3
Admissions and Transfer Committee	—	3
Campus Development Committee	1	3
Computer Facilities and Policy Committee	2	2
Conference Funds Committee	2	2
Equal Opportunities Committee	1	2
Housing and Food Services Committee	1	6
Committee for the Improvement of Teaching and Learning	2	4
Library Committee	3	3
Committee on Native Studies	3	4
Parking Appeals Committee	1	1
	1 alternate	
Radio and Television Committee	5	3
Special Sessions Committee	2	—
Undergraduate Scholarship Committee	3	2
University Planning Committee	4	3
Writing Competence Committee	1	2

Bodies With Members Elected By General Faculties Council

Faculty Tenure Committees: Panel for Faculty Members	3	—
General Appeals Panel	1	—
General Promotions and Salaries Committee	2	—
The Senate: Representatives of General Faculties Council	2	—
The Universities Coordinating Council	2	—
General University Disciplinary Impanelling Boards	—	9

Pigeon Post

Please send all correspondence on this topic to the Editor, Folio, 423 Athabasca Hall.

■ Here is my suggestion for dealing with the uncouth pigeons of Athabasca Hall:

Post a notice on the rooftop inviting the birds to volunteer as experimental subjects in the Psychology Department. I have never met a pigeon, male or female, who could turn down a chance to give its time, or to sacrifice its life if need be, in the interest of scientific research. To make absolutely sure of a one-hundred-percent response, the notice should include a promise of at least footnote credit to the pigeons in all published reports of studies in which they participate. It would not be misleading or unethical to promise further that some of the brighter volunteer birds could expect to learn to play simple tunes on the piano, to perform basic dance steps, to press buttons that would activate giant machines, and so forth, since all of these skills have been learned by pigeons, and even by ordinary barnyard chickens, in the past.

Have the volunteers report to the roof of the Biological Sciences Building and let the Psych Department do the rest. I do not have to remind the university community that psychologists have developed discreet and humane methods of dismissing their experimental subjects, once they have had their way with them.

*Robert Fischer,
Student Counselling Services*

■ There is a simple solution to the pigeon paint problem on Athabasca Hall.

First set out trays of grain soaked in 245-T defoliant, and brandy. If the laced lunch is supplied daily for about a week in moderate quantities, the ill effects of the defoliant will be limited to a slight headache, and the shedding of all feathers. The brandy serves to keep the birds in a mellow state of mind and, to some extent, alleviates the shock

of cold breezes to pigeon-pimpled flesh.

Without feathers the pigeons are soon grounded and unable to decorate the building.

The warming effect of the brandy is of short duration and the birds are soon attracted to central heated ground-level bird boxes. This is where the SPCP check daily to provide the pedestrian pigeons with tiny downfilled parkas.

*Roger Vick,
Devonian Botanic Garden*

■ The magnificent and ancient stone buildings in the heart of the City of London, for centuries have endured humiliation from coal-burning fallout, and pigeon fallout! During the early 1960's Britons became pollution-conscious, and decided their majestic buildings should be seen in their real colours, and not as black and white marble. They therefore began a *monumental* clean-up campaign costing millions of pounds.

Powerful water-blasting machinery was used on the stately buildings, much in the same fashion as a dentist gives teeth a hosing with a water-gun! And so,

with this very gentle cleaning method, the City of London began, for the first time since before Dickens' time, to take on a bright and sparkling appearance—until the pigeons returned to each building in turn, and dropped their bombs.

To protect Lord Horatio Nelson, who is particularly vulnerable to disfigurement by pigeons, city authorities had his face and limbs slathered all over with a particularly gooey and clinging type of jelly. Oh, the surprise of the pigeons when an attempt was made to land! Unfortunately, it was about the same time that I left my native country, and have absolutely no knowledge whatsoever of the final outcome of the slippery Lord Nelson's monument, which has, for centuries, been a target for our flighted friends. Maybe the Fire Marshall has information as to whether or not it would be worth whipping up a pot or two of jelly, or whether the City of London considered it simply more sound to allow the reclamation of Lord Nelson revert to the jungle of bird . . . !

*Mary O. Johnston,
Faculty of Education.* □

Burns Night, 1980

Not only is 25 January the Feast of the Conversion of St. Paul; it is also the anniversary of the birth of Scotland's national poet, Robert Burns, and is therefore a grand and glorious day in the life of every Scotsman. Burns was born in Alloway, Ayrshire, on 25 January 1759, and died in Dumfries on 21 July 1796, after a short, hard and rather brutal life. His poetry and his legend live after him, and annual commemorative celebrations are held all over the world at this time of year.

At The University of Alberta Faculty Club, Raymond J.S. Grant of the Department of English presided over the festivities for the sixth year in succession, slaughtering the haggis

with his customary aplomb. On this occasion, indeed, he dispatched *two* of the beasts with his skean dubh so that all in the audience of around 350 had a chance to witness the gourmet ritual.

In his proposal of the toast to the Immortal Memory, Dr. Grant sought to investigate the enigma of the complex figure of Burns, who is at once so quintessentially *Scottish* and so *universally* admired. The answer, according to Dr. Grant, lies not in the life or the legend but in the poetry wherein may be found the key to Burns—a universal tenderness arising from a unique mixture of laughter and love: "For me, an aim I never fash; I rhyme for fun." □

people

Leszek A. Kosinski chaired a Symposium on Development and Population in South Asia sponsored by the International Geographical Union and held in Karachi, Pakistan. He also gave a

seminar at the University of Peshawar (close to the historical Khyber Pass).

B.Y. Card, Professor Emeritus, Department of Educational Foundations, is being honored at the Conference of the Western Association of Sociology and Anthropology being held in Lethbridge 6-9 February. Six of his major works are being discussed in the Symposium on Sociology of Education.

John D. Campbell, Alberta Research Council, presented a seminar titled "Energy Requirements and Alberta Forests" on 31 January.

Karol Krotki, Professor of Sociology, has been appointed to be a 'scientific godfather' to a number of research studies conducted at the Office de la recherche scientifique et technique outre-mer (ORSTOM), Paris.

Ruth McCorkle, a clinical nurse specialist and nurse researcher who recently visited the Universities of Alberta and Calgary Faculties of Nursing, as well as the W.W. Cross Cancer Institute, was named one of the 50 top Science Writers by the American Cancer Society.

coming events

Listings must reach the Editor by 9 a.m. on the Thursday prior to publication. Written notification is necessary. Listings should be sent to 423 Athabasca Hall.

Lectures and Seminars

Department of Biochemistry
7 February. 12:30 p.m. "Control of Protamine Gene Expression in Trout Testis," with L. Gedamu of The University of Calgary. 227 Medical Sciences Building.

Faculty of Arts

7 February. 8 p.m. P. Robberecht will speak on "Aimez-Vous Sarraute?" On a variation of *Aimez-Vous Brahms: Two Contemporary French Novelists.* L2 Humanities Centre.

Department of Entomology

7 February. 4:30 p.m. J. O'Hara will discuss "Classification and Phylogenetic considerations of *Siphora* Meigen (Diptera: Tachinidae) and closely related genera." 602 Athabasca Hall Annex.

Department of Classics

7 February. 4 p.m. H. Miller will talk about "Ancient Antecedents in Modern Greek Poetry." 1-8 Humanities Centre.

Department of Chemical Engineering

7 February. 3:30 p.m. S. Singh will discuss "Application of Network Analysis to Energy Modelling." 340 Chemical/Mineral Building.

Department of Sociology

7 February. 2 p.m. H. Hiller of The University of Calgary will speak on "Paradigmatic Shifts, Indigenization, and the development of Sociology in Canada." 14-6 H.M. Tory Building.

University Library Hours Winter Session 1980

Effective 1 February - 30 April 1980

Variations from these hours are posted at the entrance to each service point.

	Monday-Thursday	Friday	Saturday	Sunday
Cameron Library				
Building Open	7:45 a.m.-12:00 midnight	7:45 a.m.- 6:00 p.m.	12:00 noon- 5:00 p.m.	12:00 noon-12:00 midnight
Circulation Services	7:45 a.m.- 9:45 p.m.	7:45 a.m.- 5:45 p.m.	12:00 noon- 4:45 p.m.	12:00 noon- 7:45 p.m.
Fines Collection	8:30 a.m.- 4:30 p.m.	8:30 a.m.- 4:30 p.m.	closed	closed
Government Publications	8:30 a.m.- 9:30 p.m.	8:30 a.m.- 5:00 p.m.	12:00 noon- 5:00 p.m.	closed
Health Sciences Library	8:30 a.m.- 9:30 p.m.	8:30 a.m.- 6:00 p.m.	12:00 noon- 5:00 p.m.	12:00 noon- 4:00 p.m.
Interlibrary Loans	8:30 a.m.- 4:30 p.m.	8:30 a.m.- 4:30 p.m.	closed	closed
Micromaterials	8:30 a.m.- 9:00 p.m.	8:30 a.m.- 5:00 p.m.	12:00 noon- 5:00 p.m.	closed
Photoduplication	8:30 a.m.- 4:30 p.m.	8:30 a.m.- 4:30 p.m.	closed	closed
Science Library	8:30 a.m.- 9:30 p.m.	8:30 a.m.- 6:00 p.m.	12:00 noon- 5:00 p.m.	no service
Reserve Reading Room	7:45 a.m.- 8:00 p.m.	7:45 a.m.- 5:00 p.m.	12:00 noon- 5:00 p.m.	12:00 noon- 5:00 p.m.
Special Collections				
Mon. & Fri. (To 17 April)	8:30 a.m.- 4:30 p.m.	8:30 a.m.- 4:30 p.m.	closed	closed
Tue.-Thur.	8:30 a.m.- 9:30 p.m.			
Undergraduate Library	8:30 a.m.- 5:00 p.m.	8:30 a.m.- 5:00 p.m.	no service	no service
Education Library				
Building Open	7:45 a.m.-10:00 p.m.	7:45 a.m.- 6:00 p.m.	12:00 noon- 5:00 p.m.	12:00 noon- 6:00 p.m.
Circulation Services	7:45 a.m.- 9:45 p.m.	7:45 a.m.- 5:45 p.m.	12:00 noon- 4:45 p.m.	12:00 noon- 5:45 p.m.
Reference Services	8:00 a.m.- 9:30 p.m.	8:00 a.m.- 5:00 p.m.	1:00 p.m.- 5:00 p.m.	1:00 p.m.- 5:00 p.m.
Reserve Room	7:45 a.m.- 9:30 p.m.	7:45 a.m.- 5:30 p.m.	1:00 p.m.- 5:00 p.m.	closed
Curriculum Library	8:00 a.m.- 9:30 p.m.	8:00 a.m.- 5:00 p.m.	12:00 noon- 5:00 p.m.	12:00 noon- 5:00 p.m.
Law Library	7:45 a.m.-12:00 midnight	7:45 a.m.-10:00 p.m.	8:30 a.m.- 5:00 p.m.	12:00 noon-12:00 midnight
Mathematics Library	9:00 a.m.-12:00 noon	9:00 a.m.-12:00 noon	closed	closed
	1:00 p.m.- 5:00 p.m.	1:00 p.m.- 5:00 p.m.		
Physical Sciences Library	9:00 a.m.- 5:00 p.m.	9:00 a.m.- 5:00 p.m.	closed	closed
Rutherford Libraries				
Rutherford North				
Building Open	7:45 a.m.-12:00 midnight	7:45 a.m.- 6:00 p.m.	12:00 noon- 5:00 p.m.	12:00 noon-12:00 midnight
Circulation Services	7:45 a.m.- 9:45 p.m.	7:45 a.m.- 5:45 p.m.	12:00 noon- 4:45 p.m.	12:00 noon- 7:45 p.m.
Reference Services	8:30 a.m.- 9:30 p.m.	8:30 a.m.- 6:00 p.m.	12:00 noon- 5:00 p.m.	1:00 p.m.- 5:00 p.m.
Rutherford South				
Periodicals Reading Room	8:30 a.m.-12:00 midnight	8:30 a.m.-12:00 midnight	12:00 noon-12:00 midnight	closed
Bound Periodicals Circulation	8:30 a.m.- 9:00 p.m.	8:30 a.m.- 5:45 p.m.	12:00 noon- 4:45 p.m.	12:00 noon- 6:00 p.m.
Bound Periodicals Checkpoint	8:30 a.m.-12:00 midnight	8:30 a.m.-12:00 midnight	12:00 noon-12:00 midnight	12:00 noon- 6:00 p.m.
Rutherford South Study Hall	7:00 a.m.- 2:00 a.m.	7:00 a.m.-12:00 midnight	7:00 a.m.-12:00 midnight	9:00 a.m.- 2:00 a.m.
John W. Scott Library	9:00 a.m.-10:00 p.m.	9:00 a.m.-10:00 p.m.	9:00 a.m.- 5:00 p.m.	1:00 p.m.- 5:00 p.m.

Department of Computing Science

7 February. 4 p.m. D. Cheriton of The University of British Columbia will discuss "Portable Operating System Research: Experience with Toth." 617 General Services Building.

8 February. 3 p.m. "Practical Aspects of Computer Performance," with speaker Gordon Symes. Dr. Symes is with the Control Data Corporation, Toronto. 723 General Services Building.

SUB Art Gallery

8 February. 12 noon. M. Campbell will read her own work. SUB Art Gallery.

Biofeedback Association of Alberta

8 and 9 February. Fourth annual conference at Convention Inn South. Telephone 432-5030 for information.

Faculty of Pharmacy and Pharmaceutical Sciences

11 February. 4 p.m. O. Mamer of McGill University will talk about "Some Uses of Mass Spectrometry in Pharmacology." 4069 Dentistry-Pharmacy Building.

12 February. 4 p.m. O. Mamer will discuss "Metabolism and the Mass Spectrometer." 4069 Dentistry-Pharmacy Building.

13 February. 8 p.m. O. Mamer will speak on "Mass Spectrometry as a Quantitative Method." 2022 Dentistry-Pharmacy Building.

Department of Anaesthesia

11 February. 8 p.m. First in the series *History of Anaesthesia* with R. Humble discussing "From Antiquity to Morton." N2-115 Education North Building.

Broadus Lecture Series

11 and 13 February. 4 p.m. The first and second in the series "Literature and the Notion of 'Game'" with lecturer R.R. Wilson of the English Department. Lecture Theatre 3, AV Centre, Humanities Centre.

Social Science Dining Club

11 February. 6 p.m. C. Hobart

will address the first meeting of the Social Science Dining Club on the topic "Wage, Employment and Cultural Retention in the Northwest Territories." The Faculty Club. For more information concerning the Club, please contact Hugh King at 432-5234 (by 12 noon 8 February for those interested in attending the seminar).

Edmonton Public Library

11 February. 7:30 p.m. The *Woodcroft Writers' Series* presents A. van Herk and M. Jakober. Woodcroft Library, 13420 114 Avenue.

Department of Sociology

12 February. 12 noon. K. Krotki will discuss "The Changing Nature of Refugee Migration." Music Room of Centennial Library.

Canadian Institute of Ukrainian Studies

12 February. 12:30 p.m. F. Swyripa will talk about "Cold War on the Home Front: Watson Kirkconnell and Ukrainian Canadians." 352C Athabasca Hall.

Department of Physics

12 February. 3:30 p.m. R. McCorkle of New York IBM will discuss "New X-ray Sources and their Applications." V128 Physics Building.

Division of East European Studies

12 February. 3:30 p.m. B. Korda will speak on "Monetary and Pricing Problems in Soviet and East European Foreign Trade." 311 Athabasca Hall.

Department of English

12 February. 12:30 p.m. G. Bowering will talk about "Touch: Selected Poems, Allophanes, Protected Footwear, A Short Sad Book, Another Mouth." AV L-3 Humanities Centre.

14 February. 12:30 p.m. D. McFadden will discuss "On the Road Again, The Great Canadian Sonnet, A New Romance." AV L-3 Humanities Centre.

Amnesty International

12 February. 8 p.m. E. Mendes will discuss "The International Legal Protection of Human Rights." 165 Education Building South.

Department of Sociology

13 February. 12 noon. J. Gartrell will talk about "Boom-town, Alberta: Mobility in Fort McMurray." 5-15 H.M. Tory Building.

Population Research Laboratory

13 February. 3 p.m. L. Kennedy will speak on "The Organization and Planning of Surveys." 5-15 H.M. Tory Building.

Department of Geography

14 February. 12 noon. J. Gardner of the University of Waterloo will talk about "The Tempo of Geomorphic Change in the Canadian Rocky Mountains as Revealed by Slope Processes." 3-36 H.M. Tory Building.

Department of Entomology

13 February. 7:30 p.m., and 14 February. 4:30 p.m. J. Adis of the Smithsonian Institute will speak on "Amazonian Inundation Forests: short-term refugia and long-term evolutionary centres?" 62 Athabasca Hall Annex.

Department of Chemical Engineering

14 February. 3:30 p.m. T. Daniel and H. Goldberg will discuss "Derivation of Equilibrium Prices for Oil and Gas in Canada." 340 Chemical/Mineral Engineering Building.

Department of Biochemistry

14 February. 4 p.m. D. Rintoul of St. Louis, Missouri, will talk about "Plasma Membrane Structure and Function in the Mouse LM Cell." 227 Medical Sciences Building.

Department of Art and Design

15 February. 2:20 p.m. P. Bartl will discuss "Graphic Design." 2-20 Fine Arts Building.

Political Science Election Forum

15 February. 12 noon. "Summing Up the Campaign," with speakers to be announced. TL-11 H.M. Tory Building (Tory Turtle).

Theatre

Workshop West

7 February. "Surprise, Surprise," and "Johnny Mangano and His Astonishing Dogs." Telephone 436-7378.

Studio Theatre

Continuing. "The Birthday Party." Performances in Corbett Hall, Studio Theatre Stage '80.

The Citadel Theatre

Rice Theatre
Until 10 February. "Billy Bishop Goes to War."

Shoctor Theatre

Until 10 February. "Hey Marilyn."

Zeidler Hall

Until 8 February. "Pinocchio."

Orchesis Creative Dance Club

14, 15, and 16 February. 8 p.m. The University of Alberta Orchesis Dance club will present "Dance Motif '80." Performance in Students' Union Theatre. Tickets available at HUB or from Orchesis members.

Films

Provincial Museum

9 February. 2 p.m. "World in a Marsh," "Waterfowl, a Resource in Danger," and "Spruce Bog."

10 February. 4 and 7 p.m. "Birth of a Legend." Free admission.

The National Film Theatre

7 and 8 February. 7:30 p.m. "Caddie." (Australia, 1975). 9:20 p.m. "Mad Dog Morgan." (Australia, 1975).

10 February. 8 p.m. "The Devil's Playground."

13 and 14 February. 8 p.m. "The Idiot." (Japan 1951). Showing in the Citadel's Zeidler Hall.

Department of Germanic Languages

13 February. 7:30 p.m. "Jane bleibt Jane." 17 Fine Arts Building.

Students' Union Cinema

All showings at 7 and 9:30 p.m.
9 February. "Klute."
10 February. "North Dallas Forty."

The Edmonton Film Society

11 February. 8 p.m. "Women," (Hungary 1977). SUB Theatre.
13 February. 8 p.m. "The Thing." Tory Lecture Theatre. Admission by series ticket.

Edmonton Public Library

Showings in Centennial Library Theatre.
9 and 10 February. 2 p.m. "Tommy." Free admission.

Children's Cinema

9 February. 10:30 a.m. "Wynken, Blynken and Nod," "Lambert, The Sheepish Lion," "Tea For Two Hundred," "The Red Balloon." Free admission.

The Princess Theatre

8 and 9 February. 7:15 p.m. "Saturday Night at the Baths," "A very Natural Thing."

10 February. 9:30 p.m. "Satyricon."

11 February. 7 p.m. "The Homecoming." 9 p.m. "A Safe Place."

12 and 13 February (second day 9:05 p.m.) "The Buddy Holly Story." 9:05 p.m. "The Homecoming."

13 February. 7 p.m. "Taxi Driver."

14 February. 7 p.m. "Madame Rosa." 9:30 p.m. "Happy Birthday Wanda June."

Music

The Shadows at Waldens

Until 9 February. The Edmonton Saxophone Quartet."

University Mixed Chorus

7, 8, 9 February. 8:15 p.m. The University of Alberta Mixed Chorus will hold its 36th Annual

Concert. Convocation Hall, Arts Building.

Department of Music

All Performances in Convocation Hall.

10 February. 3 p.m. Edmonton Youth Orchestra I.

11 February. 8 p.m. The University of Alberta String Quartet.

12 February. 8 p.m. The St. Cecilia Orchestra.

13 February. 5 p.m. Andrew Bacon on Viola.

14 February. 8 p.m. Mardene Frances in a soprano student recital.

Edmonton Public Library

8, 9, and 10 February. 8 p.m. Susan Aaron and Company will present a dance concert "Piano Bar Blues." Tickets \$5/adults and \$3.50/students. Centennial Library Theatre.

Edmonton Symphony

8, 9 February. 7:30 p.m. Violinist Franco Gulli will join the symphony as guest. Jubilee Auditorium.

South Side Folk Club

Saturday, 9 February will feature Alan Roberts and Dougie McLean from Scotland with Ian Bowden. The Orange Hall, 104 Street and 84 Avenue at 8 p.m. Tickets at Keen Kraft Music 10204 107 Avenue. For Club information call 475-1042 or 475-2260.

Edmonton Chamber Music Society

13 February. 8 p.m. "The Alban Berg Quartet." Students' Union Theatre. Admission by series ticket.

Exhibitions

Alberta Culture

Continuing. "Old Fourlegs—What a Fish Story!" Displaying in the west alcove of the Provincial Museum.

Ring House Gallery

Continuing. "Carl Heywood Prints." Screen prints and lithographs.

8 February. "Sally Barbier."

Mixed media drawings and ceramic sculpture.

Students' Union Art Gallery

Until 10 February. Photographs by Mattie Gunterman and Brian Wood.

University Special Collections

Continuing. "The Illustrated D.H. Lawrence." B37, Cameron Library.

Horizon Art Gallery

7 February. 7 p.m. "Skyscape" watercolors by Adeline Rockett. 10114 123 Street.

Radio

Department of Radio and Television

6 February. 7:30 p.m. Extensions: Extensions programming. News about the Faculty of Extension programming.

CKUA (580 AM/95 FM)

8 February. 7 p.m. *The Legal Maze: The Witness*. The position of the witness in the justice system.

CKUA radio

9 February. 7 p.m. *University Concert Hall: Nova and Antiqua*. New and old music.

CKUA radio

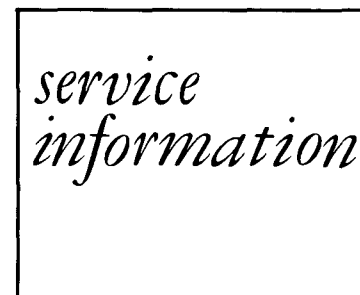
10 February. 8 a.m. *Idealog: The Dissident*. A look at the dissidents within the Soviet Union. CKXM (100.3 FM)

10 February. 11:30 a.m.

"Improvisation and Collective

Department of Drama

Creation," with J. Sharpham of the University of Illinois. CKUA radio.



Information must reach the Editor by 9 a.m. on the Thursday prior to publication. Written notification is necessary. Notices should be sent to 423 Athabasca Hall.

Scholarships, Fellowships and Awards

Contact the Student Awards Office, Athabasca Hall, for information on the following.

Graduate Student Awards

For Research on Co-operation and Co-operatives

Awards valued at \$2,000 are available for graduate research on some aspect of cooperation and cooperative activity.

The Mackenzie King Travelling Scholarships

Graduate scholarships valued at \$3,500 are available for study in international or industrial relations. The scholarships are tenable in the United States or the United Kingdom.

The Mackenzie King Open Scholarship

Graduate scholarships valued at \$3,500 are available for any field of study. Tenancy is open.

The E.B. Eastburn Fellowship Fund

One PhD fellowship of unspecified value is available for study in the sciences. The fellowship is tenable at any Canadian university.

Notices

HUB Apartments

Applications for summer and fall accommodation will be accepted 11 to 15 February at the HUB Office. Suites will be assigned as requested and a waiting list established. There is no need to line-up over night this year. Simply pick-up an application form and return it to the Office. Assignments will be confirmed by the end of March. New rates are not available at this time pending approval by the GFC Housing and Food Services Committee.

Non-Credit Courses

Faculty of Extension

The courses listed below are open to all members of the public and members of the University community.

Art of Africa

Date: 14 February. Time: 10 Thursdays, 7:30-9:30 p.m. Telephone: 432-3034.

Basic Macro Photography

Date: 16 February. Time: 9 a.m. to 4:40 p.m. Telephone: 432-3034.

Dealing With Guilt and Worry

Date: 16 and 17 February. Time: 9 a.m. to 5 p.m. Class limit: 16. Fee: \$45. Telephone: 432-5069.

Water Well Completion
Date: 17 to 21 March. Fee: \$180.
Telephone: 432-5532.

Work Science Seminar
Date: 25 March. Fee: \$70. Telephone:
432-5532.

Research Grants

Granting Agencies: Application Deadlines

This list of deadline dates for submissions to granting agencies for research funds, exchange programs, and travel grants is published every month in *Folio*. To allow sufficient time for processing, all applications should reach the Research Grants and Contracts Office at least ten days before the deadline date. Where other University resources are involved, the time requirement may be much longer than ten days and such applications should therefore be submitted well in advance. An extra copy of the application should be provided for the Research Grants and Contracts Office.

Further information may be obtained by consulting the *Calendar of Granting Agencies for Research Funds, Exchange Programs, and Travel Grants*, which is available in the offices of Deans, Directors of Institutes and Centres, and the Department Chairmen, or by telephoning the Research Grants and Contracts Office, 432-2002. Note: Although the *Calendar* is updated on a continuous basis, the following information is subject to change without notice. If staff members have advance information on forthcoming changes, the Research Grants and Contracts Office would appreciate being advised. Code: (R) Research Funds; (E) Exchange programs; (T) Travel grants.

Granting Agency	Deadline Date
Banting Research Foundation (R) Source Number 40 Canada Council—Explorations (R) Source Number 61	1 March 1 June 1 Dec.
Canadian Diabetic Association (R) Source Number 80	15 March 15 Sept.
Dame Lillian Penson Memorial Fund (T) Source Number 340 Social Sciences and Humanities Research Council —Travel Grants for International Scholarly Conference: (T) Source Number 394	1 March 1 July 1 Nov.
Travel Grants for International Representation	1 March 1 July 1 Nov.
New and Supplemental	
(R) Source Number 420 US Department of Health, Education, and Welfare	1 March 1 July 1 Nov.
Renewals	
	1 Feb. 1 June 1 Oct.

Positions Vacant

On-Campus

Non-Academic Positions

To obtain further information on the following positions, please contact *Personnel Services and Staff Relations*, third floor, SUB, telephone 432-5201. Please do not contact the department directly. Positions available as of 1 February 1980.

Clerk (\$764.41-\$822.72)—University Health Services
Financial Records Clerk (\$764.41-\$912.91)—Office of the Comptroller
Clerk Typist II (\$764.41-\$912.91)—Rehabilitation Medicine
Dental Assistant I (part-time) (\$475.80-\$569.52)—Dental Clinical Sciences
Dental Assistant I (term) (\$793.02-\$949.20)—Dental Clinical Sciences
Library Clerk III (\$822.72-\$984.39)—Boreal Institute
Senior Clerk (\$822.72-\$984.39)—Dean of Engineering
Senior Clerk (part-time) (\$411.26-\$492.20)—Academic Staff Association
Senior Financial Records Clerk (\$849.11-\$1,021.79)—Industrial and Vocational Education
Clerk Typist III (\$849.11-\$1,021.79)—Office of the Comptroller
Clerk Typist III (part-time) (\$5.00/hour)—Student Affairs
Clerk Steno III (\$883.20-\$1,065.78)—Botany (term); R.S. McLaughlin Examination and Research Centre (trust); Obstetrics and Gynaecology; Secretariat; Physiology; Mineral Engineering; Educational Administration
Clerk Steno III (part-time) \$441.60-\$532.89)—Introductory Biology
Admission Records Trainee/Coordinator (\$883.20-\$1,109.78)—Office of the Registrar
Accounts Clerk (\$912.91-\$1,109.78)—Office of the Comptroller
Medical Steno (\$949.20-\$1,158.17)—Pediatrics (two positions); Psychiatry
Secretary (\$984.39-\$1,205.47)—Business Administration and Commerce, (two positions)
Administrative Clerk (\$984.39-\$1,205.47)—Romance Languages
Laboratory Assistant II (\$793.02-\$949.20)—Pharmacology (term, trust); Provincial Laboratory
Building Services Worker II (\$883.20-\$1,065.78)—Housing and Food Services
Computer Assistant II (\$912.91-\$1,109.78)—Computing Services
Technical Assistant (\$912.91-\$1,109.78)—Technical Services
Electron Microscope Technician I (\$984.39-\$1,205.47)—Pharmacology (trust, term)
Animal Technician I (trust) (\$984.39-\$1,205.47)—Health Sciences Small Animal Program
Technician I/II (\$984.39-\$1,367.16)—Pharmacy (trust, term)
Food Services Worker IV (\$1,021.79-\$1,257.17)—Housing and Food Services
Draftsman I (\$1,021.79-\$1,257.17)—Physical Plant
Building Services Worker IV (\$1,065.78-

\$1,311.06)—Physical Plant
Assistant Buyer (\$1,065.78-\$1,311.06)—Purchasing
Publications Assistant II (\$1,109.78-\$1,367.16)—Computing Services
Technologist I (\$1,109.78-\$1,367.16)—Zoology (trust, term)
Farm Equipment Technician II (\$1,109.78-\$1,367.16)—Animal Science
Bacteriology Technologist I/II (\$554.89-\$778.16)—Medical Bacteriology (trust, term, part-time)
Plant Operator I (\$1,205.47-\$1,489.25)—Physical Plant
Electronics Technician II (\$1,205.47-\$1,489.25)—Technical Services
Electronics Technician II/III (\$1,205.47-\$1,697.12)—Physics
Accounting Assistant (Audit) (\$1,257.17-\$1,556.33)—Internal Audit
Engineering Technologist III (\$1,367.16-\$1,697.12)—Physical Plant
Art Technician Demonstrator II (Carpenter) (\$1,367.16-\$1,697.12)—Drama
Programmer/Analyst II (\$1,367.16-\$1,697.12)—R.S. McLaughlin Examinations and Research Centre (trust)
Electronics Technician III/IV (\$1,367.16-\$1,943.69)—Language Laboratories
Programmer/Analyst II/III (\$1,367.16-\$2,021.59)—Administrative Systems (six positions);
Programmer/Analyst II/III (\$1,367.16-\$2,021.59)—Physics
Technician IV (\$1,427.65-\$1,771.92)—Mineral Engineering; Plant Science (Farm Equipment)
Biology Technologist III/IV (\$1,427.65-\$2,021.59)—Genetics
Machinist Technician III (\$1,489.25-\$1,850.00)—Technical Services
Building Superintendent II (\$1,489.25-\$1,850.00)—Physical Plant
Programmer/Analyst III (\$1,623.42-\$2,021.59)—Administrative Systems; Computing Services (two positions)
Technologist IV (\$1,623.42-\$2,021.59)—Electrical Engineering

The following is a list of currently available positions in the University of Alberta Libraries. The bulletin board in the Cameron Library—Room 512 should be consulted for further information as to availability and position requirements.

Library Clerk II (\$764.41-\$912.91)—Circulation
Library Clerk III (\$822.72-\$984.39)—Education
Library Assistant I (\$883.20-\$1,065.78)—Bibliographic Verification; Science
Programming Analyst III (\$1,623.42-\$2,021.59)—Systems
Programming Analyst IV (\$1,934.69-\$2,420.85)—Systems

Off-Campus

Executive Director

The Association of Canadian Universities for Northern Studies, Ottawa, is accepting applications for the position of Executive Director. Beginning 1 September 1980, the successful

candidate will be appointed for two years with a possible secondment. ACUNS is an association of twenty-eight Canadian universities active in northern studies and research. The position requires a working knowledge of Canadian universities and/or related government activities, administrative skills; research or comparable northern experience in university and/or government. Remuneration at university scale.

Submit résumé or inquiries by 15 May 1980 to: J.G. Nelson, Chairman, Search Committee, Faculty of Environmental Studies, University of Waterloo, 200 University Avenue West, Waterloo, Ontario, N2L 3G1.

Advertisements

must reach the Editor by 3 p.m. on the Thursday prior to publication, which date also serves as the deadline for cancellation of advertisements. The cost of placing advertisements is 20 cents per word for the first week and 10 cents per word for subsequent weeks ordered before the next deadline. Advertisements must be paid for in advance, and are accepted at the discretion of the Editor. We regret that no advertisements can be taken over the telephone. For order forms or further information, telephone 432-2325.

Accommodations available

For sale—Garneau. 10921 81 Avenue, 1,350 sq. ft., semi-bungalow. Two large bedrooms upstairs. Spacious living and dining rooms. Beautiful garden with mature trees. Assumable \$65,000 mortgage at 11%. Asking \$88,000. 439-2948.

Lake front lots within 52 miles—will build to suit. Altona Construction. 435-8234.

Altona packaged homes—Allied Genstar Builder. Excellent lots available. 435-8234.

For sale—By professorial owners, \$62,500. Bright convenient townhouse. Three bedrooms, 1,300 sq. ft. plus full basement, garage, all appliances. Bus stop at door, school fields opposite. Occupation mid-May. Phone evenings 487-5927. No agents.

For sale—By builder: Weekend retreat or year-round home on 1/2 acre treed lot, Parkland Beach, Gull Lake 1½ hours from Edmonton. Cathedral style, overlooking lake, studio loft, two bedrooms, 1½ baths, fireplace, carpeting, patios. \$78,500. Phone 1-843-2095. No agents.

For sale—1: Three bedroom bungalow with main floor family room, open fireplace, double garage. \$113,900. 2: Pleasantview bi-level, huge living, dining rooms, two baths, attached garage. \$55,000, mortgage at 10¼%. 3: Executive two storey, backing onto ravine, six bedrooms. 4: Treed lot, Glamorgan - Riverbend. Call Liz Crockford 434-0555 res., Spencer Real Estate 436-5250.

Sublet—Attractively furnished one bedroom apartment. Edge University. End February—end July. 432-3925,

433-1551, evenings, 432-3270 messages only.

For sale—7623 Saskatchewan Drive. This 1,743 sq. ft. bungalow has a lot to offer. Eight rooms on main including study or den, two fireplaces. Fully developed down, with rumpus room, games room with wet bar and four bedrooms. Air conditioned, triple garage. Within walking distance of University. Asking \$179,500. To view call Donald Toreson 484-7126 or res. 454-7653. Royal Trust Corporation, 15628 Stony Plain Road.

For sale—Belgravia. Very comfortable home in immaculate condition, exceptionally well-built. Four bedrooms, two baths, two fireplaces, fully developed basement, garage. Beautiful big trees. Appliances and drapes negotiable. Call Century 21, Birch Realty, Ltd. Bernie Bock 437-1215.

For sale—Invest your renting dollars to own your own condominium. Professionally decorated. Spacious bedrooms, large kitchen, living room and dining room. Less than \$50,000. Convenient southwest location. Phone Joy Murray, Block Bros. 436-4240, 437-1612.

For rent—Small, three bedroom, family house. Aspen Gardens. Available 1 February. Garage. \$475 monthly. Deposit \$250. Call 433-5915 after 6 p.m.

For sale—Belgravia. Bright, spacious, three bedroom, 1,291 sq. ft. bungalow. Fully developed basement, wet bar, mature trees. Phone 434-6098.

For sale—80 acres of rolling, recreational land, 50 miles from city, near lake. New cedar cottage. Offers over \$50,000. Phone 436-3174.

For sale—Jasper Park. Cedar chalet styled home, many outstanding features. Windsor Park—Gracious 1,800 sq. ft. bungalow situated on magnificent large landscaped view property. Richford Estates—Opportunity to live on one acre of land, beautiful 2,000 sq. ft. house, one mile from city limits on city water. \$197,000.—Garneau—revenue property R6, revenue property R4. Asking \$115,000 and \$99,900 respectively. Please call Prim Spidell at 436-3050 or 436-2450. Potter Realty Co. Ltd.

For sale—Open beam bungalow. Greenfields, quiet location convenient to schools. Spotless condition, \$114,900. Attractive, two bedroom condo-

miniums close to University. Five major appliances included in price, \$68,900. Joyce Byrne 435-6064, 436-5250 Spencer Real Estate.

For sale—Lovely Alcan bungalow in first class condition. Located in old Riverbend. Offering a total of four bedrooms, three baths, main floor laundry, built-in vacuum and underground sprinklers. \$129,000. Call Barbara Allen 434-0729. Spencer Real Estate 436-5250.

For rent—Furnished house, 4-6 months. Small but nice. Southside. \$300 per month. 1 March. 466-6946.

For rent—Three bedroom bungalow, west end, unfurnished, excellent condition. Available 15 March. \$550 monthly. \$500 damage deposit. 435-0613.

For rent—Two bedroom house, three-bedrooms in finished basement. Double car garage. Millcreek area, close to University, downtown. Trees, shrubs, fruits. From 1 July to 29 August. Responsible family. 433-7531.

For sale—By owner. Luxury townhouse on southside. 1,700 sq. ft. with attached garage. Three large bedrooms. \$79,900. Large mortgage, 10½%. 435-3020.

For rent—1,600 sq. ft. bungalow, Westmount, four bedrooms, rumpus room, fireplace, double garage, available furnished or unfurnished from 1 May. \$750 monthly. Phone 452-0351 evenings.

For sale—Attractive, three bedroom bungalow. Near University. Fireplace. Developed basement. Beautifully landscaped. Large first mortgage. \$79,900. Open house every Saturday 2-4 p.m. 11420 71 Avenue or Phone 433-7207.

For rent—University Avenue. Modern furnished side duplex. Two bedrooms, full basement, front drive, garage, fenced yard. All appliances, dishwasher, garbage disposal, washer, dryer. 1 March. \$525 monthly. Damage deposit. Phone 436-2666.

Accommodations wanted

Professor teaching summer sessions (July, August) desires housing for family of four, (boys 5 and 2). Need not be for entire six weeks. Possibilities of house exchange in Kelowna, B.C. Contact Maurice Williams, Assistant Dean, Okanagan College,

Kelowna, B.C. V1J 4X8. 604-762-5445. Dr. Nils Ellfolk, Professor of Biochemistry at the University of Helsinki, and family desire furnished house or apartment (two or three bedroom) preferably April to August, 1980. Phone H.B. Dunford, Chemistry. 432-3818.

Sublet apartment or house in University area. 1 April or 1 May, until 31 August, 1980. 432-1167 after 5 p.m. Furnished, two bedroom house (apartment) for visiting scientist, preferably near Meadowlark/University, from March/April till August. Phone Norbert 432-2105.

Automobiles and others

Wanted older Datsun 510 or other Japanese car, working or not. 477-2908.

1976 VW Rabbit. Deluxe, four door, radio, passive restraint, one owner, green. Excellent condition. 462-9449, 467-5443.

Goods for sale

High quality electronic piano, \$1,200. Full 88 notes. Dean 432-3796, 436-1879. Wanted old color portable TVs. Call 477-2908.

Desk chair, drum table, two end tables. 436-9516.

Services

Edmonton Yoseikan Karate Club:

Call Sport Alberta 458-0440.

Professional typing. 464-4887.

Experienced typist available. 462-3934.

Top quality typing, 455-6398.

Donnic Typing Services Ltd. Specializing in word processing. This system is excellent for theses, manuscripts, tables, mailing labels, repetitive originals. Several type styles available, also allows you to keep information

on disks for future updates and editing changes. Floor 2, 10444 82 Avenue, 432-1419.

Typing on Word processor. Call Darlene 987-2989, 452-1074.

Expert typing—theses, etc. 455-0641.

Peking and Shanghai food. Cooked by chef of old "Shanghai House." Shanghai Garden Restaurant, 10120 118 Avenue. Roasted Peking duck (order in advance), hot firepot, dumplings, fried Chinese hamburger, beef buns, cayenne and meat noodles, sour and hot meat broth soup. Closed Tuesdays. 11:30 a.m.-11:30 p.m. 474-2516.

Professional translator. French, English, German. 433-7781.

Complete home renovations, repairs.

European craftsmanship. 454-7140.

Singing lessons for young children.

Studio near University, Edith-Mary Smith. 436-4780.

House and basement framing. Renovations. Premium Builders, 963-3453, 481-1247.

Handyman, carpentry service. Call after 6 p.m. 434-9709.

Experienced typist, southside. 435-0404.

Vacation Time? Gain added security at no extra cost. For experienced house setters call 439-3040 (evenings). Will provide care for pets and plants. References provided.

Professional, quality typing. 489-1507.

Avon & money, Avon & money—go

together like a horse and carriage.

Doesn't rhyme, but it's still true.

Want to know more? Call 465-1088.

Edmonton Toastmistress Club—Poise, self-confidence, public speaking. Meets Wednesday evenings. 489-8871, 432-7083.

Aspen languages—offers French and Italian classes. French literature. 435-4467.



WISE INSURANCE SERVICES LTD.

General Insurance, Auto, Fire, Life

#204 - 10645 Jasper Avenue
Edmonton, Alberta T5J 1Z8

Bus. 424-2141

University of Alberta Orchestra presents

DANCE MOTIF '80

Feb 14, 15, 16, 1980
8:00 p.m. - Students' Union Theatre
University of Alberta Campus
Adults \$3.50 Students & Children \$2.50
Tickets: HUB & Orchestra members
Information: 432-4727

Kicha & Duck 東宮

ORIENTAL PALACE

SPECIALIZING IN
KOREAN STYLE BARBECUE
Licensed

Mon. - Sat. 11:30 a.m. - 1 p.m. Sunday 4 p.m. - 10 p.m.

PH. 425-1566 10249 - 107 Street, Edmonton, Alberta